

Cracklin' Static

August 2022 Edition



**In-person and
virtual meeting
8 AM August 6,
for details see
pg 4 ...**

SNARS NET on DMR – Tuesdays 8pm
DMR Talk Group: 31328 SNARS

SNARS Treasury Closing Balances From AE7OX As of 7-31-22

Account	
Operating	\$9,416
Savings	\$12,314
Self Insurance	\$15,201
PayPal	\$2,067
Convention	\$4,212

Total **\$43,210**

Net Monthly **-\$173**
Net YTD **-\$4,029**

SNARS Membership as of 7-30-22

Extra	148	33%
General	129	29%
Technician	147	33%
Advanced	16	4%
No License	8	2%

Total **448**

SNARS ARRL Members as of 7-30-22

Regular	278	62%
Life	37	8%

PRESIDENT'S VOICE

President John Miller, N7JDM

Email: jmil912@gmail.com



It's hotter than the hinges of Hades! I hope everyone is managing (enjoying?) the heat. The big news this month is our treasurer Bill Jones AE7OX is stepping down from his position on the board after five years of service in the position.

Thank you Bill for your willingness to do the job, I hope you enjoy yourself going down the road, literally. HI HI

Nominations for a replacement are active, anyone who has been a SNARS member for at least a year are eligible to take the position, so if you have the desire to do your part please speak up. Accounting experience is welcome but not necessary. Bill has graciously offered to bring the new treasurer up to speed on how things have been done. Please consider raising your hand to fill the position. Thanks a million.

In other news, our next Reno Hamswap will be held again in the Cabela's parking lot on Sept. 17. Now's the time to get ready to clean out the shack or make space for new acquisitions. Setup is at 7AM with an 8 AM opening. There will be coffee and donuts as usual, so see you there.

73, John Miller N7JDM



PO BOX 7727 Reno NV 89510
 Yearly Dues: \$40.00 Individual • \$50.00 Family
 775.453.4142 <http://snars.org>

2022 Officers

President.....John Miller N7JDM
 Vice-President.....John Byerly, N7ROJ
 Treasurer.....Bill Jones, AE7OX
 Secretary.....Anthony Marcin, W7XM
 DirectorWes Vick, KG7QXE
 DirectorJim Shepherd, W6US
 DirectorBarry Bettman, K6ST

2022 Staff

Cracklin StaticHowie Holden, WB2AWQ
 W7TA TrusteePeter DeBay, KE7VSR
 KR7ENO Trustee.....Howie Holden, WB2AWQ
 Control OperatorPat Sheehan, W7DED
 Youth Involvement.....Barry Bettman K6ST
 NVQSO Coordinator.....Jim Shepherd, W6US
 HistorianJon Fox, KF7KTC
 Tech Team LeadPat Sheehan, W7DED
 MembershipKim Farnham, KG7TMA
 PIOGreg Krantz, NT7Q
 VE Coordinator.....Krystal Rhoades, AJ6GC
 Meeting GreeterBill Jones, AE7OX
 Noon Net ManagerWes Vick, KG7QXE
 DMR Net ManagerAnthony Marcin, W7XM
 Reno Ham SwapWes Vick, KG7QXE
 WebmasterErik Andreasen, K6CZH
 Club Sales Manager.....Vacant
 Recording Secretary.....Doug Edmondo, W7DBE

Cracklin Static Publication

Editor: Howie Holden WB2AWQ - holden7471@msn.com
 Cracklin' Static is the Newsletter of, and sponsored by the Sierra Nevada Amateur Radio Society. Cracklin' Static is published the week before meetings. Opinions expressed herein are those of the editors and contributors and should not be considered as official expressions of the Club Officers, Staff or Club Members, or as endorsements by same.

Material for publication may be edited to enhance readability or to save space. We reserve the right to use whatever font size, line spacing or other tools as may be required to publish this Newsletter. **Deadline for input to the newsletter is 1500 hours on the Sunday** prior to the 1st Saturday (or whichever Saturday is the meeting) of each month.

SNARS Wide Area Linked System

147.030 + PL 123.0	Sparks, Fernley, Fallon	Online
147.210 + PL 100.0	Reno, Sparks	Online
147.150 + PL 123.0	Lake Tahoe, Truckee, Carson	Online
146.925 - PL 123.0	Lovelock, Fallon	Online
146.670 - PL 123.0	Winnemucca	Online
444.875 + PL 100.0	Yerington	Not Linked
444.125 + PL 123.0	Reno Sparks	Offline

DMR Systems

444.925 + CC 1	Reno, Sparks	Online
444.825 + CC 1	Dayton, Fallon, Carson	Online
443.925 + CC 1	Lake Tahoe, Truckee, Carson	Online
443.950 + CC 1	Incline Village	Offline
442.875 + CC 1	Sparks, Fernley, Fallon	Not Linked
442.850 + CC 1	Downtown Reno	Online
441.950 + CC 1	Fallon, Fernley	Offline

Fusion Systems

146.610 - PL 123.0	Reno, Carson, Dayton	Online
--------------------	----------------------	--------

IRLP / EchoLink Systems

147.300 + PL 123.0	Reno, Sparks	Online
--------------------	--------------	--------

Packet / APRS

145.050 - RNO	Reno, Carson, Dayton	Online
145.050 - ROSE	Lake Tahoe, Truckee, Carson	Online
144.390 - TOULON	Lovelock, Fallon	Offline

Standalone Systems

147.390 + PL 100.0	Reno, Carson, Dayton	Online
443.075 + PL 123.0	Reno, Carson, Dayton	Online
927.0875 + PL 114.8	Reno, Carson, Dayton	Online

Online Offline Not Linked

NOTE: The status of repeaters may not up to date on this page. Check with the SNARS website for repeater status.

Weekday on the SNARS Linked System

147.030 + PL 123 – Sparks/Fernley
 147.150 + PL123.0 – Lake Tahoe / Truckee
 147.210 + PL 100.0 - Reno
 444.875 + PL 100.0 - Yerington
 146.925 - 123.0 – Lovelock / Fallon
 146.67 – PL 123.0 - Winnemucca

Monday through Friday @ 12:00pm

Open to all amateur radio operators. A general informational net for the amateur radio community of Northern Nevada and Eastern California. Radio Checks and Questions are welcomed.

Nets on the SNARS Linked Systems

147.210 + 100.0 | 147.030 + 123.0 | 147.150 + 123.0
 147.670 – 123.0 | 146.925 – 123.0 | 444.875 + 100.0

ERC Net for NV and Northern CA	Monday @ 9:15pm
N. Western NV ARES Net	Thursday at 7:30pm
Northern Nevada Preppers Net	Wednesday @ 8:00PM
Hospital Net	Friday @ 10:00AM

Nets on IRLP (GSR) System

Repeater: 147.300 + 123.0

Amateur Radio Newline	Monday - 8:00PM
Nevada Skywarn Net	Wednesday - 7:00pm

Nets on Simplex/HF

Jefferson Noon Net	7.204 LSB	Daily - 12:00pm
6 Meter Net	50.350 USB	Tuesday – 8:00pm
2 Meter Weak Signal	144.250 USB	Wednesday - 8:00PM
2 Meter Simplex Net	146.500 FM	Thursday – 8:00PM
10 Meter Net	28.350 USB	Sunday – 2:00PM

SNARS Weekly DMR Net – Tuesdays
8:00PM

SNARS Talk Group 31328

Open to Members and Guests. A general information net each week on DMR.

SNARS CALENDAR

SNARS Board Meeting Wednesday, August 10, 6:00PM.
 Location and mode Chin Chin, Sparks, and Zoom

HAM RADIO NIGHT on Zoom 7:00 PM Monday, August 15, 2022 see <https://snars.org/hamradionight/>

Reno QRP Group Meeting Tuesday, August 16, 11am – 12pm, Jack's Coffee Shop #2, 605 N Wells Ave, Reno, NV. Contact Ed, WD7Y WD7Y@sbcglobal.net for more info. If cancellation is needed, will be announced on the SNARS noon net.

Next months SNARS Breakfast Meeting , September 3, 2022, 8 AM. Location and media mode tentative depending on Board decision.

WELCOME NEW MEMBERS

AS OF July 30

Steven	Silva	WA7COP
Kevin	Paulsen	KK6DGL
Valerie	White	KK7HCP
Joshua	Flippo	KK7GYK
Bruce	Parks	KK7GZQ
Brad	Benson	KK6YFU
Kevin	Fish	KI6QVF

SNARS In-Person and Virtual Monthly Meeting

**SNARS (hybrid in-person & virtual zoom) Monthly Meeting
Saturday August 6, 2022**

In-Person 8 AM PDT (coffee and donuts)

SNARS Meeting at 9 AM both zoom and in-person

In-Person @ Regional Public Safety Training Center (5190 Spectrum Blvd, Reno) - or - join us via Zoom

In Person location (no registration, just show up)

Regional Public Safety Training Center

5190 Spectrum Blvd, Reno

Room 103 & 105

Topic:

**ARRL Update with
Tony W7XM, ARRL Nevada
Section Affiliated Club Coordinator,
and SNARS Secretary**



**MEETING
NOTICE!**

To join via Zoom, register here:

Questions? Contact Barry K6ST@arrl.net

<https://us06web.zoom.us/meeting/register/tZ0rdO-qqDMqE9WoDxBUwGxMAW-sZHDF5GRe>

More Info In-Person / Register Zoom: <https://snars.org/monthly-meeting/>



SPECIAL ELECTION

NOTICE OF SNARS Special Election at 9:00AM PDT August 6, 2022 during the SNARS membership meeting

We currently have an open position on the Board of Directors for SNARS. We are asking the members of SNARS to please help by serving your organization by either nominating your self or another member of SNARS to serve. The Nominee must be a member of SNARS for 1 year or more.

The board is a very active group where we meet monthly to go over the expenses, projects and activities for the organization. The board is a great group of amateur radio operators with various levels of experience which provide for the great ideas and services the organization provides to the amateur radio community and of course to the members of SNARS.

Remember this is your organization/club and your input and ideas are always welcomed and encouraged.

We are specifically looking for someone to take on the role of the Treasurer for SNARS. If you have an interest or a background in accounting/financial or wish to learn the board will support the new candidate in their role serving as the organizations Treasurer.

This position will serve the remainder of the term through 2023.

Special Election Schedule.

Call for Nominations - Closes Wednesday, August 3, 2022.

Verify Nominations - August 4 & 5th, 2022.

Announce Candidates at Members Meeting, Saturday August 6th, 2022.

Open Voting | Zoom Attendees may submit via form which will be provided | In person ballots will be provided to those in attendance.

Votes will be tallied and announce the selected candidate by the end of the meeting.

* An email with the NOMINATIONS link was sent from snars@snars.org to all SNARS members on July 28, 2022 at 3:30p PDT, Subject: "Mini Static - Open Board Position Call for Nomination". Please check your email inbox for the email to nominate.

73,
Sierra Nevada Amateur Radio Society
Tony W7XM, SNARS Secretary
snars@snars.org

THE NAME OF THE GAME

Jim Shepherd, W6US nvjims@gmail.com

TONES AND OTHER SOUNDS

There are a variety of different tones and sounds use by radios for control and data. The beeps, hums and braaaaps you hear (and don't hear) as you tune across the bands is amazing.

The first experience with tones that most hams encounter is with the sub-audible tones on a FM VHF-UHF radio. To access most repeaters, you need to 'encode' a specific tone. These are known as the Continuous Tone Coded Squelch System (CTCSS) and there are about 50 different tones from 67 Hz up to 257 Hz. Various manufacturers tried to capitalize on this system, and they used their own trademarked (™) names for the same thing. Motorola used PL™ (Private Line™), GE just used Tone™, BK Relm calls it CG™ (Channel Guard™), Kenwood uses QT™ (Quiet Talk™) and you might see TG™ on E.F.Johnson radios for ToneGuard™. ToneLock™, Quiet Call™, C.Tone™, and others may also be used. They are all the exact same thing, a low level tone added to your signal (encode) or required by your receiver (decode).

The tone is added to the signal to be about 15% of the total deviation of the signal. For our currently wideband system, that means that the ctcss should be set for about 750 Hz deviation. On a narrowband system, it should be set for about 450-500 Hz deviation. If you don't know what deviation is, stay tuned, I'll cover it in a future article.

To avoid driving you crazy, all modern radios have a high pass audio filter that strips the tone off of the signal before sending it to the speaker. The same filtering is in the repeaters so that they do not try to retransmit the tone which may be distorted by the processing. If tone is needed on the output of the repeater, it is freshly generated and added to the signal.

The next set of tones you may hear are Dual Tone Multi Frequency (DTMF) tones. These are the common 12 tones sent by your telephone and 4 additional ones usually on the column of buttons just to the right of your numeric keypad (ABCD). Each tone consists of two different frequencies that are mixed in the encoder. We use these tones primarily to

remotely control equipment at the repeater sites. You will hear control operators sending these tones to unlink repeaters, control remote bases and query station telemetry. On repeaters equipped with an autopatch, users can make phone calls using the DTMF tones. Some home stations have weather stations that can be queried using a DTMF sequence to give you the current observations. These are high level tones usually set at 3000Hz deviation in a wide-band system.

At Field Day this year, I was tuning across the bands, and a new ham asked "what is that whistle?" He was referring to the heterodyne caused by a carrier further down the band from the station I was copying. No, it was not part of the signal from the station I was working, just some noise from another signal generated by the difference in frequency from that signal. CW is made copyable by this difference in frequency, and most operators tune in the station so it has a tone that suits their hearing. Other things like birdies and some of the infamous interference sounds like the woodpecker abound in the non-FM world of radio.

There are 'Digital' modes, and they have a whole litany of different sounds. WB8NUT has put together a description of these modes and a short audio clip of each at: <http://wb8nut.com/digital/>. Some are harsh sounds like packet, and others are almost musical with distinct tones. Listen on 145.05 to hear the packet go braaaaaap, or 14.074 for FT8—tuning up from there a few kHz, you will hear other modes.

If you happen to listen on a link from a base station link radio up to a mountain top base, you may hear a 2175 Hz burst followed by a continuous 1950 Hz tone at a lower level. There may be other short tones included at the start. These are function tones for a tone remote system and they can be used to change channels or ctcss tones on the system. I haven't seen this on the ham bands in this area, but you may hear this when you are monitoring some public safety systems. Like the ctcss, the tone is stripped off before it is sent out on the main radio.

Finally, we get to one of my favorite tones, 1000 Hz... When you hear that on the radio system, you will know that the techs are hard at work setting levels and maintaining the equipment for you!

MIKE'S MISSIVES CHAPTER SIXTY NINE

Mike Katz, N7MSK

FCC PART 97: §97.107 Reciprocal operating authority.

A non-citizen of the United States ("alien") holding an amateur service authorization granted by the alien's government is authorized to be the control operator of an amateur station located at places where the amateur service is regulated by the FCC, provided there is in effect a multilateral or bilateral reciprocal operating arrangement, to which the United States and the alien's government are parties, for amateur service operation on a reciprocal basis. The FCC will issue public announcements listing the countries with which the United States has such an arrangement. No citizen of the United States or person holding an FCC amateur operator/primary station license grant is eligible for the reciprocal operating authority granted by this section. The privileges granted to a control operator under this authorization are:

(a) For an amateur service license granted by the Government of Canada:

(1) The terms of the *Convention Between the United States and Canada* (TIAS No. 2508) *Relating to the Operation by Citizens of Either Country of Certain Radio Equipment or Stations in the Other Country*;

(2) The operating terms and conditions of the amateur service license issued by the Government of Canada; and

(3) The applicable rules of this part, but not to exceed the control operator privileges of an FCC-granted Amateur Extra Class operator license.

(b) For an amateur service license granted by any country, other than Canada, with which the United States has a multilateral or bilateral agreement:

(1) The terms of the agreement between the alien's government and the United States;

(2) The operating terms and conditions of the amateur service license granted by the alien's government;

(3) The applicable rules of this part, but not to exceed the control operator privileges of an FCC-granted Amateur Extra Class operator license; and

(c) At any time the FCC may, in its discretion, modify, suspend or cancel the reciprocal operating authority granted to any person by this section.

SHORT TAKES (By Jim Shepherd W6US)

Jim's column will be back next month

NAME THAT
RIG?

(Answer on page 11)



YOUTH INVOLVEMENT

This month's Youth Involvement news comes to you from:



YACHT Young Amateurs Communications Ham Team

Make your presence known by checking in to the finest U.S. youth net in **ham radio**. Our youth count for 2022 now stands at 51 with 13 adults also included. With 485 members of the facebook group <https://www.facebook.com/groups/1748195922167148> This Young Amateurs Communications Ham Team is expanding the voice of youth in ham radio, all around the world.

The purpose of the Young Amateurs Communications Ham Team is to expand horizons in the field of communications along with general and advanced ham radio techniques, and to foster a greater appreciation of the role they play in the overall hobby of amateur radio, as well as giving kids a challenge and enjoyment. We have 302 members in 32 states and 9 countries. Come sail with us, and join our echolink nets. Keep YACHT a "force" in the field of youth ham radio.

**"YACHT, May
Excitement fill your
Sails and Catch the
Ham Radio Wave as
we Ship our Signal
around the World"
Promoting the
enjoyment of Ham
Radio with
emphasis on youth.**

Echolink net Sat. 7pm CST on <YACHT> conference #954283 Weekly YACHT NEWS mailed to members. Check out our current webpage listed above left. This one will be updated from time to time with current info. For more info about Young Amateurs Communications Ham Team, click on

<https://yachthams.webstarts.com>



Chris Brault KB8YVJ YTM109 is the ARRL Hiram Percy Maxim young award winner for 2016. YACHT sends its heartiest congratulations. Chris received the 2020 Newsline Young Ham of the Year. His QRZ page is <http://www.qrz.com/db/kd8yvj> He is now 17 and about to finish up his final year at H.S.

If you would like to help out with the youth in ham radio, please contact:

Barry K6ST k6st@arrrl.net

Nevada Section Youth Coordinator

ARRL (American Radio Relay League) www.arrrl.org

The national association for amateur radio

SNARS HAM RADIO NIGHT

3rd Monday of each month at 7PM PT on Zoom
Join together and Elmer each other for Ham Radio Night on
MONDAY, AUGUST 15, 2022, 7PM

The topic smaller breakout groups will be:

Winlink Analog VHF/UHF DMR/Fusion POTA

Each participant can move themselves around to different breakout topics in zoom conferencing to enjoy.

If you have any questions or would like to be of service as an Elmer, please contact K6ST Barry k6st@arrrl.net



Register below for our next Ham Radio Tech Night, SNARS (virtual on Zoom conferencing) , 2022, 7:00PM PST
<https://us06web.zoom.us/meeting/register/tZYsceitrz4sE9bTm2ZKMyADLIYZ-McC6Bqr>

W7SSB's FUN STUFF

220 THE FORGOTTEN BAND

The **1.25-meter, 220 MHz** or **222 MHz** band is a portion of the **VHF** radio spectrum internationally allocated for amateur radio use on a primary basis in ITU Region 2, and it comprises frequencies from 220 MHz to 225 MHz. From US amateur radio bands picture, we can see that 1.25M (222-225MHz) is there for the hams who keep operator license classes: E=Amateur Extra, A=Advanced, G=General, T=Technician, N=Novice. and it can use for RTTY,data,phone, and image.

As a Ham said " I'm a bit of a 220 aficionado, but decent 220 equipment can be hard to come by. The 1.25 meter band has some unique properties, blending the propagation advantages of the 2 meter and 70cm bands. So 220 radios and repeater systems tend to have better range and coverage than similar VHF and UHF systems."

With FCC enforcement since 2018 developments in HT radios for 222-225 MHz handheld models have become fewer. But there are also some hams that want to talk on the 1.25 M, 220 Mhz repeater. According to the ARRL information, While the majority of repeaters (over 6000)are on 2 meters, there are more than 1600 repeaters on 222 MHz, more than 5000 on 440 MHz.Certain segments of each band are set aside for FM operation. For example, on 1.25 meters, repeater inputs are found between 222.32 and 223.28 MHz. The corresponding outputs are between 223.92 and 224.98 MHz.2Frequencies between 223.42 and 223.9 MHz are set aside for simplex operation. Locally we have several 220 repeaters that are connected to the Condor Net and the East Coast Reflector <http://news.eastcoastreflector.com/> .Currently the big three Yaesu, Kenwood and Icom don't make 220 mobile rigs. Alinco makes a tri - bander that includes 220. Several Chinese companies such as TYT and Anytone make mobile radios for 220. Many of the old Icom IC 375A and 375H all mode transceivers are going for big \$\$\$\$. Try it, you may like it before we lose it !



RECEIVE BCI FILTERS

AM broadcast stations transmitting in the frequency range from 550kHz to 1700kHz cause havoc with HF and VHF receiving operations, often inducing carriers, modulation, broadband noise and other disturbances into delicate equipment. Such interference can frequently be heard mixing with

other received signals in the shortwave bands and commonly overwhelms front ends of modern receivers. Broadcast reject filters reduce AM band signals to levels where local Stations can still be received in most cases, but are no longer threatening to other desired services. A must for serious low frequency DXers or Amateur 160 Meter users.



There are several companies that make quality filters such as Morgan Systems, PAR Electronics, DLW, and several more companies both domestic and Chinese.



You can spend \$19.95 - to several hundred dollars for one. As always you get what you pay for!

HPF (High Pass Filter) you can get to cut out the broadcast band . Normally either 80 meters and below or 160 meters and below.

LPF (Low Pass Filters) will cut out broadcast interference below 500KHz. This is for the users of LF (Low Frequencies) and VLF (Very Low Frequencies) including the new Ham bands 2200 and 630 meters.

Some of these filters such as the Morgan Systems filters you can transmit through up to several hundred watts.

Try one and open up your operating time frames
Have fun and stay tuned!

Don W7SSB

ARES NEWS

EVENTS CALENDAR

EVENT 2022	DATE	DATE END	SPONSOR/ORGANIZER	COORDINATOR	CONTACT
Vegas to Reno Off Road Race	9/10/22	9/12/22	Best in the Desert Racing Assn	Keith KC7HTK	kc7htkeith@hotmail.com
Tour De Tahoe	9/11/22		Tahoe Amateur Radio Assn	Paul Gulbro, WA6EWV	wa6ewv@juno.com
Reno Air-Races	9/14/22	9/18/22	WC-ARES	Bob Miller WA6MTY	wa6mt@gbis.com
Grinduro SBTS	TBD		Plumas Amateur Radio Ops	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
Nevada Day Parade	10/29/22		NV AREA NW DEC	John Abrott KD7NHC	jabrott77@gmail.com
Sparks Turkey Trot	11/24/22		WC-ARES	Bob Miller WA6MTY	wa6mt@gbis.com

NOTE: Plumas ARC always have a need for operators. Go over to some beautiful country and help out the Plumas Amateur Radio Club

Are you interested in attending the Reno Air Races for free? Well, not totally free, if you can help us with 16 hours of volunteering time with air race security, I can get you full access to the air races, a \$500 plus value. Free parking, access to the entire Air Races, plus the "Pits" where the pilots and their crews are. Some of my ARES team volunteer for 16 hours before Wednesday of the races and have all the races to themselves, Thursday, Friday, and Saturday. Others only want a "One Day Pass" giving 4 hours and the remainder of the day for the races.

We provide volunteers to help with security starting with the Sunday of the week of the races.

JOBS:

- 1. Along the Ramp at the Pits to prevent unauthorized people from accessing the flightline.**
- 2. Along the Ramp at the Jet Ramp or the Military Ramp again to prevent unauthorized people from accessing the flightline.**
- 3. We man the gates into the Pits.**
- 4. Also, any of the gates entering the Air Races in general.**

Check passes to the Grand Stands or any other place we are requested.

I have access to a golf cart and can come to the parking lot, pick you up, check you in, then transport you to Security where you will be assigned a job. Bring your HT, programmed for 146.55 simplex and/or RX 444.700 TX 449.7 PL 103.5. Also bring a headset or earbud as it can get really, noisy.

Any friends or family that would like free access, get me their name, contact phone and email.

Bob Miller WA6MTY

Emergency Coordinator for Washoe County

Amateur Radio Emergency Service

775 843-5952

www.wcares.us

wa6mt@gbis.com



Ham Swap

Saturday, September 17, 2022

Cabela's, Reno, Nevada

8:00 AM - Open to Public
Swap Opens to The General Public
10:00 AM - Raffle Drawing
Purchase raffle tickets at the event.
- ARRL Gift Certificates
- An HT Radio
- Misc Radio Related Items
Questions or Comments

info@renohamswap.com

More Info:

<http://renohamswap.com/>

EVENT DETAILS

Saturday, September 17, 2022

Cabela's, Reno, Nevada

7:00 AM - Swap Setup

\$10.00 Per Parking Lot Space

Approx 8'x16'

Online Swap Space Registration:

<http://renohamswap.com/index.php?id=registration&lang=en>

About Reno Ham Swap

The Reno Ham Swap is held yearly in May and September. The Reno Ham Swap is becoming a premier event for ham swappers in the Northern Nevada and Sierra Nevada Areas. The event draws over 25 unique ham swappers and over 200 attendees and growing. The event is hosted by the Sierra Nevada Amateur Radio Society, Inc.

FUN STUFF FOR AUGUST

August has SIX ARRL/NCJ sponsored contests, shown in BOLD, plus FOUR state QSO parties, plus there's the US Islands contest on the 27th, (Wingfield Park is included in that one!) Have fun!

6 Aug 0001 to 7 Aug 2359 28 10-10 International Summer Contest, SSB www.ten-ten.org

6 Aug 1800 to 7 Aug 0559 1.8-28 North American QSO Party, CW www.ncjweb.com

6 Aug 1800 to 7 Aug 1800 222 and up ARRL 222 MHz and Up Distance Contest CW Ph Dig www.arrrl.org/222-mhz-and-up-distance-contest

13 Aug 0000 to 14 Aug 2359 3.5-28 WAE DX Contest, CW www.darc.de

13 Aug 1400 to 13 Aug 2200 3.5-28 Kentucky State Parks on the Air CW Ph Dig www.k4msu.com/kypota

13 Aug 1400 to 14 Aug 0400 1.8- Maryland-DC QSO Party CW Ph Dig www.w3vpr.org/mdcqsop

20 Aug 0600 to 21 Aug 2359 10 GHz to light ARRL 10 GHz and Up Contest CW Ph Dig www.arrrl.org/10-ghz-up

20 Aug 1800 to 21 Aug 0559 1.8-28 North American QSO Party, SSB www.ncjweb.com

21 Aug 1800 to 21 Aug 2359 3.5-28 ARRL Rookie Roundup, RTTY www.arrrl.org/rookie-roundup

27 Aug 0000 to 28 Aug 2359 2.3 GHz and Up ARRL EME Contest CW Ph Dig www.arrrl.org/eme-contest

27 Aug 0400 to 29 Aug 0400 1.8-28 Hawaii QSO Party CW Ph Dig www.hawaiiqsoparty.org

27 Aug 1200 to 28 Aug 0300 1.8-28,50 W/VE Islands QSO Party CW Ph Dig www.usislands.org/qso-party-rules

27 Aug 1400 to 28 Aug 2000 3.5-28,50 Kansas QSO Party CW Ph Dig www.ksqsoparty.org

27 Aug 1600 to 28 Aug 0400 1.8-28 Ohio QSO Party CW Ph www.ohqp.org

Check out the rest here:

<http://www.arrrl.org/files/file/Contest%20Corral/2022/August%202022%20Corral.pdf>

If you're not into contests, there's always DX to chase! Although August is a bit slim overall, there are some good catches this month, from around the globe! Here's a few of the better ones:

Aug 05 to Aug 09	Rodrigues I	3B9
Aug 07 to Aug 20	Tonga	A35JP/p
Aug 08 to Aug 20	Maldives	8Q7AG
Aug 09 to Aug 23	Seychelles	S79
Aug 23 to Aug 23	Albania	ZA

Check <https://www.ng3k.com/Misc/adxo.html> for updates on DXpeditions to make sure they're still a go and see other listings!

RENO QRP SLOW SPEED CW NET

NEXT NET SESSIONS (two of them) WILL BE August 4 and August 25, at 10 AM Pacific. Check with WD7Y@sbcbglobal.net to confirm times. Target frequency 7.045 MHz, if busy search somewhere near that frequency.

THE FOLLOWING SHOULD ALWAYS BE IN YOUR REPORT:

NAME, RST, LOCATION, RIG, POWER, ANTENNA.

REMEMBER TO INCLUDE RST IN YOUR REPORT

Feel free to add something else in your exchange.

Take some time to report RST for other OP's or anything else that comes to mind.

Sharing information about you and your equipment will accomplish two things.

First It gives you and everybody else practice sending and copying.
Second It is nice to spend time on the air with your friends. Consider this a QRP meeting on the air.

Relax and have some airtime fun with your friends.

73/72 Ed/WD7Y

NAME THAT RIG (from page 7)

If you've been around Ham radio since the 60s, you most likely recognize this one! This transmitter is probably the most recognized "Heavy Metal" transmitter of all time, the **E. F. Johnson Viking Valiant**. The **Valiant**, which debuted in 1955, was a real bruiser at 85 pounds. "Boatanchor" has no better description than the **Valiant**. Rated at 275 watts input (and up to 200W output on CW, 150W out on AM) the **Valiant** was the mainstay of medium power operators. And it's not even the most powerful transmitter Johnson made. At the time of its introduction at \$349 dollars in kit form or \$439 dollars assembled it wasn't cheap but it was dollar for dollar the most powerful reasonably priced AM/CW transmitter on the market. The **Valiant** uses three 6146 transmitting tubes in the RF section, and two more in the high level plate modulator. The high voltage section of the power supply used 866A rectifiers, containing mercury (and thus frowned upon today) whose bluish glow made them instantly recognizable. The **Valiant** featured a very stable VFO, or crystal operation, and differential keying in which the oscillator was actually turned on a few microseconds before the rest of the RF chain, making the output quite clean. The **Valiant** covered 160 through 10 meters (no WARC, as it hadn't come along yet, but it DID have the 11 meter CB band, which was a ham band at the time the **Valiant** came out, thus making the **Valiant** sought after by the bootleg CB crowd), and the final RF amplifier with the three 6146s could be used as a linear amplifier for SSB operation. The **Valiant** was superseded by the Valiant II, in a more modern cabinet, and having some internal modifications which improved the operation somewhat. Power, coverage including 11 meters, etc., was all the same. Price jumped to \$375 kit, \$495 assembled. The Valiant II was produced through 1965, and a few years later, E.F. Johnson went out of the ham business. Yours truly owned a **Valiant** original from 1970 till about 1980. A great transmitter.



E.F. Johnson
Viking Valiant II

FIELD DAY AND POTA PIX AND STORIES WANTED!

Did you do Field Day, or did you do the SNARS POTA Event in Galena Creek Park (or any POTA or SOTA), whether with SNARS or on your own? SNARS has had a "Field Day" Summer Special Cracklin' Static for many years now, featuring Field Day and other summer radio events. If you participated in SNARS POTA event on July 16 at Galena Creek Park, or if you've got photos, stories, anecdotes, etc. of your own Field Day or POTA, SOTA or other events, and would like to have them published in SNARS Cracklin' Static Summer Special, send them to me, Howie Holden WB2AWQ: WB2AWQ@arrrl.net by August 10. The Summer Special will be released around August 15.

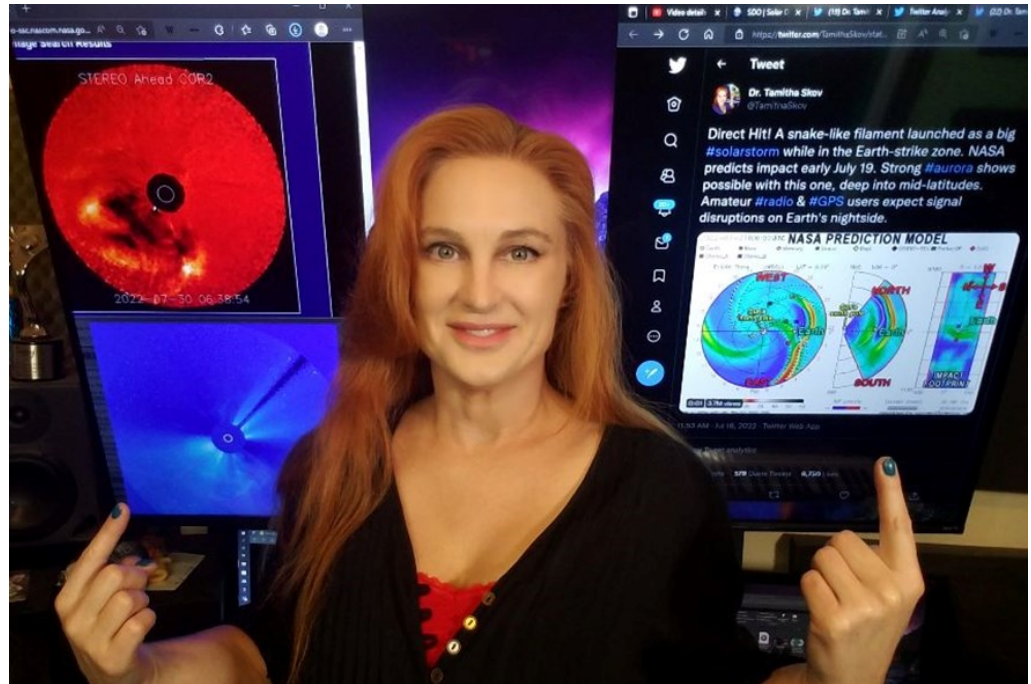
SPACE WEATHER WOMAN

from Barry K6ST

Space Weather Woman

Dr. Tamitha Skov

Dr. Tamitha Skov is a new kind of weather forecaster for our modern world. As we become more reliant on technology like our cell phones, GPS (GNSS), and other satellite services we find we are more susceptible to the effects of Space Weather. Just like terrestrial weather on Earth, Space Weather can be as mild as a rainstorm or as wild as a hurricane. Let Tamitha show you in non-science jargon how this new kind of weather impacts your daily life. You will never look at the Sun or the Earth in the same way again. After all, Space Weather is just like the weather in your own backyard, it's just a little further up.



<https://www.spaceweatherwoman.com/>

Big Flare Party

Dear Barry,

This week the big flare party has rotated to the far side of the Sun. Solar storms are still being launched as evidenced by the far-side blast back on July 30th (see the coronagraph views on the left side of my picture above). Yet on the Sun's frontside, reasonably mild conditions prevail. I for one am thankful. This has allowed me to recover from the burst of activity we've seen recently, not only from the solar flares, but also from the massive amount of media attention we got during the mild solar storming on July 19-23. I am still astounded that one of my twitter posts went viral (see the image on the right side of my picture above).

But as all things go with our rotating star, this quiet period we are enjoying now, will not last. In the next few days we will see solar flux rise again back into the triple digits and the risk for big flares and Earth-directed solar storms will rise right along with it. In fact, as I write this, we are experiencing a near M-class flare from an unnumbered region on the Sun's east limb, which will likely be named region 3070 within the next day or so.

Turning to the forecast, the large southern coronal hole I highlighted in the video is just beginning to rotate into the Earth-strike zone now. As it does, we will see solar wind speeds increase, which should bring some decent aurora views to high latitudes. At mid-latitudes, shows will be more fleeting as the magnetic polarity of this coronal hole is the wrong polarity to give us strong aurora shows. Hopeful aurora chasers at mid-latitudes might need to wait just a little longer in order to catch decent views, but if the far side blast and the near M-flare is any indication, the big flare party will return sooner than most expect.

Cheers,
Tamitha



Goodbye Big Flares, Hello Dust Storm Season on Mars | Space Weather News 07.29.2022

Click to play: <https://www.youtube.com/watch?v=F3T4V11VSPc>

PONY EXPRESS RERIDE PHOTOS from Gerry KJ7GEZ

Some of the riders in the Pony Express Reride



My wife, Charlotte Miller, enjoying a bacon, onion ring, BBQ sauce cheese burger at Midlegate Station, Middlegate NV. One of the perks of working the Pony Express. The actual handoff is at Cold Springs, but we are partial to the burgers at Middlegate. Cold Springs aren't bad either.

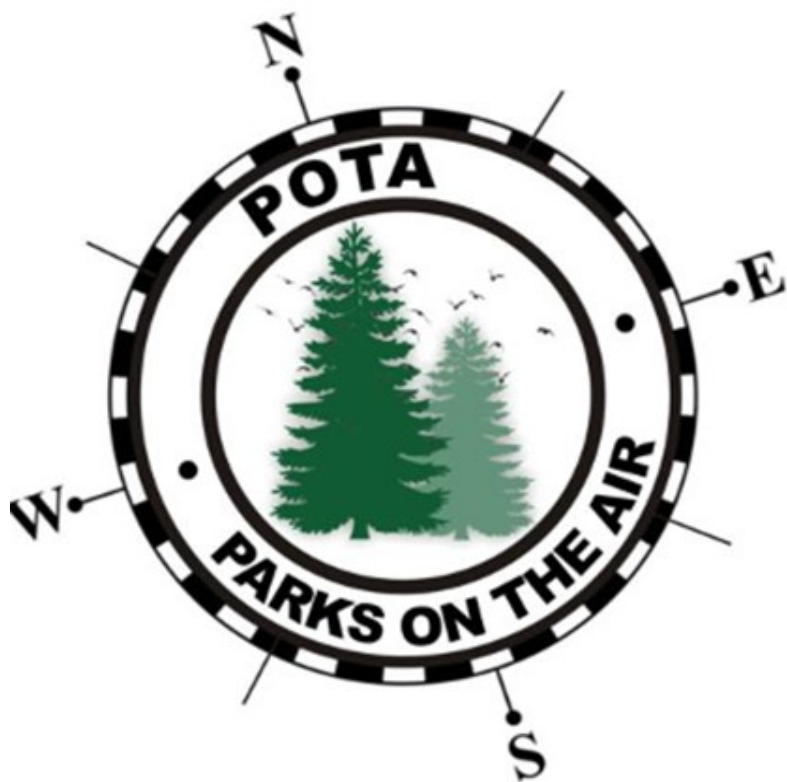


The re-ride and the actual Pony Express took the same amount of time, 10 Days.



We took our RV all the way to the Schellbourne rest area north of Ely to provide relay for our network. And then we shadowed the Pony route to the drag strip south of Fallon where I got in a Follow Pony Vehicle and played the comms guy all the way into Carson City 😊

The driver, K6CTQ is in the picture above



Radio in the Park

This past month on July 16th, we had 8 hams operate and a few ham guests come out to Gelena Creek Park for the **SNARS POTA** Gathering. It was totally fun and lots of learning happened also at the POTA activation in the Humboldt-Toiyabe National Forest (POTA K-4391 Park).



K7TDM Tyler running FT8 on 30m, and 20m for POTA and K6ST Barry learning



... and WJ9T Gary's operating station at the back of the jeep with an Icom 705 and laptop running WSJT on 15m.



WJ9T Gary's jeep with a chameleon antenna

For more pictures and write-up about this POTA event in the upcoming "SNARS Summer Special Edition Newsletter" coming out soon.

If you want to learn more about Parks on the Air, come to the Ham Radio Night via zoom at 7p pdt on Monday August 15th, 2022.

73, K6ST Barry



HIGH DESERT

HAM FEST



1st Annual High Desert Ham Fest

Oct 1st, 2022 8:30am — 3pm

Deschutes County Fairgrounds 3800 SW Airport Way Redmond, OR 97756

**Presented by High Desert Amateur Radio Group 501(c)3 and
Central Oregon Amateur Radio Emergency Communications Team. 501(c)3**

Reserve your RV site at Expo Center RV Park.
(not affiliated with HiDARG)
541-585-1569 30a/50a Full hookups
<https://expo.deschutes.org/p/rv-park>

**Motel 8 near the event will have a block of rooms reserved with
special rates. Be sure to mention HiDARG Ham Fest.**

**Online registration available in June
See www.hidarg.org for latest information.**

Door prizes and a free drawing ticket with entry. More tickets on sale during the event.

**Test sessions for Technician, General, and Extra
will be available. Be sure to contact us prior to.**

**Various local and regional Vendors will be on
hand. Special commercial vendor rates. Contact
us for more information.**

**PRIZES: Signalink, TYTQuadBand, FT-70D, Power Supplies,
UPS Unit, Legacy Equipment, much more.**



WWW.HIDARG.ORG



Registration Form and Vendor Information

\$10 per day of event... Under 12 FREE! (Advance tickets \$8 25 days prior)

Vendor Setup Sat 6am to 8:30am (Fri eve setup 4-7pm) helpers available.

Talk-in on 146.94(pl 162.2)

**DRAFT DOCUMENT! Information subject to change, dates/times/costs
will NOT change. Additional details to be posted on our website.**

CONTACT NAME: _____

CALL: _____ BUSINESS NAME (IF ANY): _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

eMAIL: _____ PHONE: _____

Mail completed form and check To:

**HiDARG Att: Event
PO Box 723
Bend, OR 97709**

**Cancellation Policy: Full refund if cancelling 1 week prior to event. 50% refund
up to 48hrs from event. No Refunds inside of 48hrs of event. Be sure to call or
email if you need to cancel. By attending this event you agree that HiDARG,
COARECT, nor Deschutes County Fair Grounds will be responsible for any personal
injuries you may incur while attending or participating in this event. Contact
Max KF7MAX via email to kf7max@arri.net if you have any questions. You
can text or call 541-706-1475 if you need to cancel. Please be sure to leave a
message and your call sign if applicable.**

WWW.HIDARG.ORG

Online registration will begin in June 2022

**Purchase of a single table includes
1 vendor ticket to event.**

**\$30 per table 8ft x 32"
Add \$5 for 1 table helper ticket
Add \$20 per extra table (no ticket)
Available Options:
Opt-A 1 table + 1 vendor = \$30
Opt-B 1 table + 1 helper = \$35
Opt-C 2 tables + 1 vendor = \$50
Opt-D 2 tables + 1 helper = \$55**

**If you need a 3rd table add \$25
3 tables max per registration.
Extra advance ticket \$8 / ticket.**

Check/Enter as appropriate below.

☐ Opt-A Enter Opt Cost
☐ Opt-B
☐ Opt-C
☐ Opt-D
☐ 3rd Table add \$25
☐ # Event Tickets x
\$8 =

TOTAL

On mail Orders the Postmark determines first come first serve with respect to vendors. First table comes with one vendor ticket, additional tickets for a helper are indicated as above. Each vendor gets a prize drawing ticket. See cancellation information.



Board of Directors Meeting Minutes

July 13, 2022 - 6:00PM

At Chin Chin plus Zoom

1. Call to order and roll call at 6:00 PM

Board of Directors:

Anthony Marcin, W7XM	P	Barry Bettman, K6ST	P	John Miller, N7JDM	P
Bill Jones, AE7OX	P	John Byerly, N7ROJ	NP	Wes Vick, KG7QXE	P
Jim Shepherd, W6US	P	Doug Edmondo, W7DBE	P		
		(Scribe)			

Guest(s) In attendance: None

2. Approval of Minutes - Discussion/Action

The June minutes were approved

3. Approval of Agenda - Discussion/Action

Approved the agenda

4. Reports

A. President's Report – Overall good time at Field Day. Barry is submitting logs

B. Secretary Report – Nothing to report. Membership at 463

C. Treasurer – June 2022 End of Month, Operating: \$9,711, Savings: \$12,024, Self Insurance: \$14,621, Paypal: \$2,816, Convention: \$4,212. Net Monthly: \$590 net YTD: -\$3,856. Memberships 26, Donations year to date \$4,259 (Amazon \$96, Members \$4,117, Paypal \$46)

Notes:

Transferred \$2,500 from PayPal to Operating

Transferred \$580 to Operating to Self Insurance

Transferred \$290 from Operating to Savings

Field Day Expenses \$1,400 which included \$300 for durable goods.

Noted that ARRL is changing how clubs get paid for membership renewals. They will send a check once memberships have been processed.

D. Technical Team – Pat / John

Repeater Upgrade – John noted that two of the new repeaters got knocked off of the shelves in the storage unit (Unsure how). One looks okay, one has casing damage. Jim S. mentioned that all sites except Rose are accessible, we need to get them installed. Question on alignment – was it done?

E. Control Operators / Trustee

Report – No report

F. Events

1. 2022 Field Day outbrief: The logs have been submitted. Jim S. asked for a detailed break down of costs for tracking purposes.
2. Preparing for NVQSO party.

G. Education & Youth Activities

1. Have 9 signed up, 5 with gear, for the SNARS POTA event on the 16th
2. In October Jamboree on the area. Last week in October, Scouts will be at the live stock event center. Will be doing Educational and STEM activities.

H. Noon Net - Noon Net Manager

Status Quo

5. Old Business

- A. In Person Meetings – For now the Training Center until our next scheduled breakfast meeting in November (Potentially move to December).
- B. Club Swag – Not much movement.
- C. Outdoor Club event – Possibly September and or combine with the fall swap meet on September 17th Potentially add in some low key small meet up type events (Coffee etc).

6. New Business

Fall Swap Meet – September 17th. Following up with Cabellas to use their parking lot.

7. Board member and Public Comments

Tony Marcin – Nothing

Bill Jones – Bill stated he wants to step down as treasurer and resign from the board as soon as possible.

Jim Shepherd – Would like more transparency from the tech committee and see if we can get more volunteers to help.

Barry Bettman – The Field Day logs and materials are submitted. Thks Tony for speaking in Aug.

Wes Vick – Nothing.

John Miller – Nothing

Doug Edmondo (Public) – Nothing.

8. Adjournment - Action

- A. Next Meeting: August 10th, 2022. Location Chin Chin plus Zoom
- B. Adjourned at 18:50